

## SESSION I

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### Three Agencies in One

- State and private forestry.
- National Forest Systems.
- Research.

### Three Areas of Focus

- Smoke/Fire Emissions
- Class 1/Wilderness AQRV's
- Carbon Management

### Fire Smoke

- Meteorology for Fire Behavior and Emissions
  - Urban Interface
- Transport and Dispersion of Smoke
  - Models
  - Remote Sensing
- Atmospheric Chemistry

Models used: SASEM, NFS PUFF, TSARS plus, PB Piedmont, CalMet, CALPUFF, Models3/CMAQ

### AQRV's (PSD and NEPA Process)

- Visibility
- Acidification of Alpine Watersheds
- Ozone Damage
- Change in Species/Community/Productivity

Models used: Magic (watershed); EPA Guidance, other.

## **Carbon Management**

- Managing Forest and Rangelands for Carbon
- Fire/Disease/Use
- Inventory/Remote Sensing
- Feedback Loops

Models used: Century; GCM's; Fire Ecology; others

## **Issues**

- Declining Research Base/Intellectual Resources  
1200 scientists (1970's) to 600 scientists Today
- Lack of Computing Base
  - O/A System only
  - Purchase/Support Restriction
- Issues much more complex and Controversial
- Need Models
  - Simple to Complex
  - Operations to Research
  - Atmosphere to Atmosphere/Ecosystem
  - Local to Global
  - 1 hour to Century